

**REMARKS**

In the Final Office Action mailed February 21, 2006, the Examiner rejected claim 71 under 35 U.S.C. § 112, first paragraph; rejected claims 71-73 under 35 U.S.C. § 102(b) as being anticipated by *Moses et al.* (U.S. Patent No. 4,425,642); and rejected claims 74 and 75 under 35 U.S.C. § 103(a) as being unpatentable over *Moses et al.* in view of *Crespo et al.* (U.S. Patent No. 5,177,768) in further view of *Noma et al.* (U.S. Patent No. 6,295,313).

By this Amendment, Applicant proposes to cancel claim 71. For the reasons discussed below, Applicant respectfully traverses the rejections of claims 72-75.

**I. Consideration of Previously Filed Information Disclosure Statements**

Applicant notes that the Examiner has not provided an initialed copy of the Form PTO 1449's and PTO SB/08's that accompanied the Information Disclosure Statements (IDS's) filed on August 18, 2004, November 2, 2004, February 15, 2005, March 11, 2005, and April 22, 2005. Accordingly, Applicant provides copies of these listed IDS's, Form PTO SB/08's, Form PTO 1449's, and accompanying stamped post cards showing receipt of these documents by the U.S. Patent and Trademark Office. Applicant respectfully requests that the Examiner consider the references identified in the attached IDS's and provide Applicant with a signed copy of the attached Form PTO SB/08's and 1449's.

**II. The Rejection Under 35 U.S.C. § 112**

The Examiner finally rejected claim 71 under 35 U.S.C. § 112, first paragraph in the Office Action mailed February 21, 2006. By this Amendment, and to expedite prosecution of this application, Applicant proposes to cancel claim 71. Accordingly, the rejection of claim 71 is rendered moot.

**III. The Rejections Under 35 U.S.C. § 102**

Applicant respectfully traverses the rejection of claims 72 and 73 under 35 U.S.C. § 102(b) in view of *Moses et al.* for the following reasons.

The Examiner asserts *Moses et al.* teaches the recitations of claim 72. (OA at 3.) In particular, the Examiner asserts “because the reference [*Moses et al.*] teaches transmitting plurality of basic signals and receiving them at a receiver,” *Moses et al.* allegedly “implies” receiving the data message transmitted from the remote device over the communication channel as a sequence of basic signals during a sequence of fixed time periods, as recited in claim 72. (OA at 7.) Applicant disagrees.

While *Moses et al.* may provide multiple frequency transmissions, the reference falls short of disclosing or even suggesting sending a sequence of basic signals during a sequence of fixed time periods. That is, merely sending basic signals and having them reconstructed, as disclosed by *Moses et al.*, is not the same as receiving a data message transmitted as a sequence of basic signals during a sequence of fixed time periods. Indeed, Fig. 3 of Applicant’s specification illustrates one example of an embodiment related to this feature of Applicant’s invention. As can be seen, a plurality of unique signals “US” may include a number of basic signals “b.” The sequence of basic signals included in corresponding exemplary unique signals may be transmitted in a sequence of fixed time periods, such as  $t_1, t_2, \dots$ . See Fig. 3 and Applicant’s specification at 10:23 to 11:6. In contrast, *Moses et al.* does not teach or suggest transmitting its plurality of fundamental frequency signals in a sequence of fixed time periods. Accordingly, the Examiner is incorrect in alleging that *Moses et al.* discloses the recitations of claim 72 merely because the reference transmits a plurality of basic signals for reconstruction by

a receiver, as this process does not address the recitations of claim 72. Therefore, because the cited art does not support the rejection of this claim under 35 U.S.C. § 102, the rejection is legally deficient and Applicant requests the rejection of the claim be withdrawn and the claim allowed.

Claim 73 depends from claim 72. As explained, the cited art does not support the rejection of claim 72. Accordingly, the cited art also does not support the rejection of claim 73 for at least the same reasons set forth for claim 72. Applicant therefore requests the rejection of this claim be withdrawn and the claim allowed.

#### **IV. The Rejections Under 35 U.S.C. § 103**

The Examiner asserts *Moses et al.* teaches the recitations of claim 74 except for determining frequency characteristics of the communication channel and each basic signal having an amplitude based on the determined channel's frequency characteristics. (OA at 4-5.) The Examiner, however, alleges the combined teachings of *Crespo et al.* and *Noma et al.* disclose these missing features. (OA at 5 and 8.) Applicant disagrees and submits the rejection of claim 74 does not meet the legal requirements for establishing a *prima facie* case of obviousness for rejecting the claim under 35 U.S.C. § 103(a).

First, contrary to the Examiner's assertions, the cited art does not teach or suggest the recitations of claim 74. Generating estimates of data signals by decoding transmitted signals does not address the recitations of claim 74, which requires, *inter alia*, "transmitting" a data message as a sequence of basic signals each having an amplitude based on a determined channel's frequency characteristic. The Examiner, however, improperly alleges that "decoding transmitted signals" to estimate data symbols implies deriving a magnitude of transmitted signals

based on frequency characteristics of a communication channel. This conclusion is not explicitly or implicitly supported by the cited art, and nor does it address the above noted recitations of claim 74. Further, although *Noma et al.* briefly mentions analyzing the frequency characteristic of a data line, the Examiner's use of this teaching ignores the context from which the analysis is performed. As described by *Noma et al.*, an answering modem receives and analyzes signals to identify characteristics of a data line and determine a symbol rate of the channel signal. As a result, the answering modem notifies the calling modem to carry out communications at a certain transmission rate (e.g., 12000 bps). *Noma et al.* at 5:41-67. Nowhere does *Noma et al.*, alone or in combination with *Crespo et al.*, teach or suggest basic signals each having an amplitude based on the determined channel's frequency characteristics. Accordingly, the Examiner has not established a *prima facie* case of obviousness in rejecting claim 74.

Second, the motivation to combine the cited art is lacking. As M.P.E.P. § 2142 states, "[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." In this case, the Examiner's allegations do not establish that a skilled artisan would have modified *Crespo et al.*, *Noma et al.* and *Moses et al.* to include the features of claim 74. Determinations of obviousness must be supported by evidence on the record. *See In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (finding that the factual determinations central to the issue of patentability, including conclusions of obviousness by the Board, must be supported by "substantial evidence"). The desire to combine or modify references must be proved with "substantial evidence" that is a result of a "thorough and searching" factual inquiry. *See In re Lee*, 277 F.3d 1338, 1343-1344 (Fed. Cir. 2002) (quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52). Moreover, the Federal Circuit has clearly stated that the evidence of a

motivation or suggestion to modify a reference must be “clear and particular.” *In re Dembicziak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

In this case, the Office Action does not show, by “clear and particular” evidence, that a skilled artisan considering the cited art, and not having the benefit of Applicant’s disclosure, would have been motivated to modify the references in a manner resulting in Applicant’s claimed combination. The Examiner’s assertion that combining *Noma et al. et al.* and *Crespo et al.* with *Moses et al.* would render it obvious for one skilled in the art to “obtain applicant’s claim limitation such as basic signals having an amplitude that is based on a determined frequency characteristic of the communication channel” does not establish a motivation or suggestion for modifying the cited art. Indeed, the Examiner merely concludes one of ordinary skill in the art would “obtain applicant’s claim limitation . . . in order to obtain correct transmitted signals subject to channel characteristic during transmission to obtain correct transmitted data.” (OA at 8.) This conclusion is not supported by any reference to suggestions from the cited art. Indeed, as noted above, the cited art does not teach or suggest these recitations of claim 74. Further, the Office Action does not show that the cited art, alone or in combination, “suggests the desirability” of a modification resulting in the combination of elements recited in the claims.

Furthermore, as M.P.E.P. § 2141.02 specifies that, “[i]n determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious (internal citations omitted). The Federal Circuit has explained that an examiner may find every element of a claimed invention in the prior art but mere identification is

not sufficient to negate patentability. *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998). The Court explained that “the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.” *Id.* In this case, the Examiner merely alleged that separate pieces of cited art disclose separate features of claim 74, and yet fails to disclose how the separate disclosures suggest and support the Examiner’s conclusion set forth in the Office Action. Such a leap requires support in the form of a motivation and suggestion from the cited art or the knowledge of the art, without guidance by Applicant’s disclosure. The Examiner has not met this burden. Without showing reasons that a skilled artisan would select or modify those elements in the manner claimed and without showing that the claimed invention as a whole would have been obvious, the rejection of the claim is improper.

For at least these above reasons, the Examiner has not established a *prima facie* case of obviousness, and Applicant request that the rejections of claim 74 under 35 U.S.C. § 103(a) be withdrawn, and the claim allowed.

Claim 75 depends from claim 74. As explained, the cited art does support the rejection of claim 74. Accordingly, the cited art also does not support the rejection of claim 75 for at least the same reasons set forth for claim 74. Applicant therefore requests the rejection of this claim be withdrawn and the claim allowed.

## **V. Conclusion**

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing the claims in condition for allowance. Applicant submits that the

proposed amendment to cancel claim 71 does not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined.

Therefore, this Amendment should allow for immediate action by the Examiner. Also, Applicant submits that the entry of the amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

Furthermore, Applicant respectfully points out that the final action by the Examiner presented some new arguments as to the application of the art against Applicant's invention. Accordingly, Applicant respectfully requests the substantive consideration of Applicant's arguments.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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